

### In the Claims

Please amend the claims as follows:

Claim 1 (previously presented): A solid biomaterial, characterized in that it comprises:

(1) at least one solid support material consisting of at least one crosslinked insolubilized dextran derivative of general formula  $DMC_aB_bSu_cS_d$  in which:

D represents a polysaccharide chain, preferably consisting of successions of glucoside units,

MC represents methyl carboxylate groups,

B represents carboxymethylbenzylamide groups,

Su represents sulfate groups,

S represents sulfonate groups,

$\underline{a}$ ,  $\underline{b}$ ,  $\underline{c}$  and  $\underline{d}$  represent the degree of substitution (ds), expressed relative to the number of free hydroxyl functional groups in a glucoside unit of the dextran, respectively in MC, B, Su and S groups;  $\underline{a}$  being  $\geq 0.3$ ,  $\underline{b}$  being equal to 0 or  $\geq 0.2$ ,  $\underline{c}$  being equal to 0 or  $\geq 0.1$  and  $\underline{d}$  being equal to 0 or  $\leq 0.15$ , provided that when  $\underline{b}$  is equal to 0,  $\underline{c}$  is not equal to 0, and

(2) at least one growth factor exhibiting activity on the osteoarticular tissues, the dental tissues and/or the maxillofacial tissues.

Claim 2 (previously presented): The biomaterial as claimed in claim 1, characterized in that said insolubilized dextran derivative is such that  $\underline{d}$  is equal to 0.

Claim 3 (previously presented): The biomaterial as claimed in claim 1, characterized in that said growth factor is selected from the group consisting of Epidermic Growth Factors (EGFs), Insulin-like Growth Factors (IGFs), Fibroblast Growth Factors (FGFs), Transforming Growth Factors (TGF- $\beta$ s), Platelet-Derived Growth Factors (PDGFs) and Bone Morphogenic Proteins (BMPs).

Claim 4 (previously presented): The biomaterial as claimed in claim 1, characterized in that said growth factor has an osteoinductive activity and is a BMP.

Claim 5 (previously presented): The biomaterial as claimed in claim 1, characterized in that it comprises insolubilized dextran derivatives and/or growth factors involved in the bone reconstruction process.

Claim 6 (previously presented): The biomaterial as claimed in claim 1, characterized in that it is insolubilized by crosslinking with the aid of a crosslinking agent.

Claim 7 (original): The biomaterial as claimed in claim 6, characterized in that said crosslinking agent is selected from the group consisting of sodium trimetaphosphate, epichlorohydrin, divinyl sulfone, gluteraldehyde and bisepoxiranes.

Claim 8 (previously presented): The biomaterial as claimed in claim 1, characterized in that it exists in the form of a hydrogel.

Claim 9 (previously presented): The biomaterial as claimed in claim 1, characterized in that it exists in the form of a freeze-dried powder.

Claim 10 (previously presented): The biomaterial as claimed in claim 9, characterized in that said freeze-dried powder is obtained from biomaterial existing in the form of a hydrogel.

Claim 11 (previously presented): The biomaterial as claimed in claim 1, characterized in that it comprises, in addition, a tissue filling material.

Claim 12 (original): The biomaterial as claimed in claim 11, characterized in that it coats particles of an inorganic or polymeric insoluble support, said particles having a diameter greater than 100  $\mu\text{m}$ .

Claim 13 (original): The biomaterial as claimed in claim 11, characterized in that said tissue filling material is selected from the group consisting of collagen, gelatin, biological adhesive, polymers of polylactic or polyglycolic acids and copolymers of polyethylene glycol with polylactide-co-glycolide.

Claim 14 (original): The biomaterial as claimed in claim 11, characterized in that said tissue filling material is an osteoconductive material selected from the group consisting of coral, hydroxyapatite, a mixture of collagen and hydroxyapatite, tricalcium phosphate, calcium sulfate and calcium carbonate.

Claim 15 (original): A process for preparing the solid biomaterial as claimed in claim 1, characterized in that the process comprises the following steps:

- crosslinking of at least one dextran derivative of general formula  $DMC_aB_bSu_cS_d$  as defined in claim 1,
- adsorption, in the insolubilized dextran derivative obtained above, of at least one growth factor as defined in claim 3,
- production of a solid biomaterial according to claim 1 in the form of a hydrogel,
- optionally, the freeze-drying of said hydrogel in order to obtain said biomaterial in the form of a powder.

Claim 16 (original): The process as claimed in claim 15, characterized in that said crosslinking of at least one dextran derivative of general formula  $DMC_aB_bSu_cS_d$  is carried out with the aid of a crosslinking agent selected from the group consisting of sodium trimetaphosphate, epichlorohydrin, divinyl sulfone, glutaraldehyde and bisepoxiranes.

Claim 17 (original): The process as claimed in claim 15, characterized in that the crosslinking of at least one dextran derivative of general formula  $DMC_aB_bSu_cS_d$  is carried out in the presence of a tissue filling material.

Claim 18 (previously presented): The process as claimed in claim 17, characterized in that said tissue filling material is selected from the group consisting of collagen, gelatin, biological adhesive, polymers of polylactic or polyglycolic acids, copolymers of polyethylene glycol with polylactide-co-glycolide, and an osteoconductive material selected from the group consisting of coral, hydroxyapatite, a mixture of collagen and hydroxyapatite, tricalcium phosphate, calcium sulfate, and calcium carbonate.

Claim 19 (previously presented): A process for preparing the biomaterial as claimed in claim 12, characterized in that it comprises the following steps:

- bringing the dextran derivative into contact with particles of an inorganic or polymeric insoluble support, as defined in claim 12, so as to obtain a composite,
- crosslinking of the composite obtained above, with a crosslinking agent,
- adsorption, in the insolubilized composite obtained above, of at least one of said growth factors.

Claim 20 (currently amended): A repair or filling material for osteoarticular, dental or maxillofacial applications, wherein said material is made of a solid biomaterial according to Claim 1, ~~wherein said material consists in a repair or filling material for osteoarticular, dental or maxillofacial applications.~~

Claim 21 (currently amended): An osteoarticular, dental or maxillofacial implant,  
wherein said implant is made of a solid material according to Claim 1, ~~wherein said material consists in an osteoarticular, dental or maxillofacial implant.~~

Claim 22 (currently amended): A coating for orthopedic, dental or maxillofacial prostheses, wherein said coating is made of a solid biomaterial according to Claim 1;  
 ~~wherein, said material consists in a coating for orthopedic, dental or maxillofacial prostheses.~~

Claim 23 (previously presented): A prosthesis, characterized in that at least part of its surface is coated with a solid biomaterial as claimed in Claim 1.